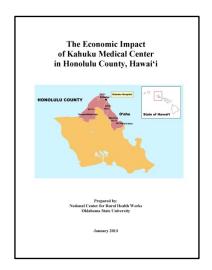
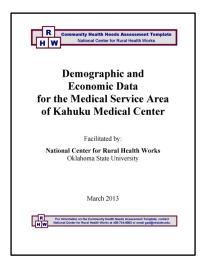
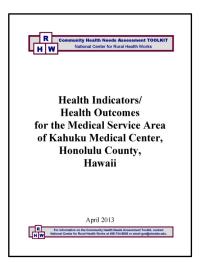
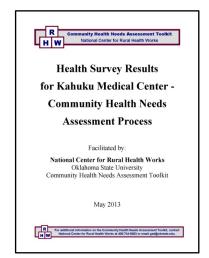
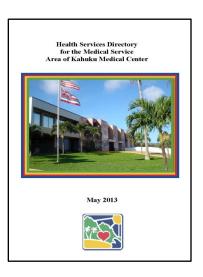
### Kahuku Medical Center Community Health Needs Assessment Summary and Implementation Strategy











### Kahuku Medical Center Community Health Needs Assessment Summary and Implementation Strategy

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#### Kahuku Medical Center Community Health Needs Assessment Summary and Implementation Strategy

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#### Introduction

New requirements for nonprofit, 501 (c)(3), hospitals were enacted under the Patient Protection and Affordable Care Act (ACA), passed on March 23, 2010. One of the most significant of the new requirements is the Community Health Needs Assessment (CHNA) that must be conducted during taxable years after March 23, 2012 and is submitted with IRS form 990. A CHNA must be completed every three years.

While the requirements are fairly new, the IRS has made strides in defining hospitals that must complete the CHNA as well as details of what is expected in the CHNA report to be submitted. At this time the only entities that must complete the CHNA are hospital organizations defined as:

- An organization that operates as a state-licensed hospital facility
- Any other organization that the Secretary determines has the provision of hospital care as its principal function or the purpose constituting the basis for its exemption under section 501 (c)(3).

The general goal behind the requirement is to gather the community input that leads to recommendations on how the local hospital can better meet and serve residents' needs. The community input is typically derived from a community survey and a series of open meetings. Local health data are presented. Community members then identify and prioritize their top health needs.

After receiving the community's input, the hospital defines an implementation strategy for their specific facility. The implementation strategy is a written plan that addresses each of the health needs identified in the community meetings. To meet Department of Treasury and IRS guidelines, an implementation strategy must:

- Describe how the hospital facility plans to meet the identified health needs, or
- Explain why the hospital cannot meet the health need.<sup>1</sup>

After the needs are identified that the hospital can address, the implementation strategy must take into account specific programs, resources, and priorities for that particular facility. This can include existing programs, new programs, or intended collaboration with governmental nonprofit or other health care entities within the community.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Internal Revenue Service. 2011. Notice and Requests for Comments Regarding the Community Health Needs Assessment Requirements for Tax-Exempt Hospitals. Internal Revenue bulletin: 2011-30. <sup>2</sup>Ibid.

#### **Overview of Process**

Kahuku Medical Center undertook a CHNA during the first half of 2013. The process included creating a CHNA advisory committee consisting of community members representing all segments of the community (race, demographics, occupations, etc.). The process was facilitated by personnel from the National Center for Rural Health, the Hawaii State Department of Health, State Office of Primary Care & Rural Health and the Pacific Basin Telehealth Resource Center, John A. Burns School of Medicine at the University of Hawaii at Manoa. The advisory committee met four times to receive input relative to their medical service area. At meetings #1, #2 and #3, the committee received and discussed three reports:

Report #1: The Economic Impact of Kahuku Medical Center

Report #2: Demographic and Economic Data

**Report #3:** Health Indicators/Health Outcomes Data

At the 4<sup>th</sup> meeting, two more studies were presented:

**Report #4:** Health Services Directory **Report #5:** Health Survey Results

At all the meetings, and especially Meetings #3 and #4, the advisory committee discussed the community's health needs. The advisory committee also conducted a survey and received completed surveys from 210 households. At Meeting #4, the advisory committee identified the most critical community health issues and specified actions to address them.

The participants, facilitators, and medical service area will be identified in the next section. A review of each of the four meetings will be presented. Then the community health needs identified by the advisory committee will be presented with their top priorities. Copies of the report are available at Kahuku Medical Center.

#### Participants, Facilitators, and Medical Service Areas

Every effort was made to have all segments (race, demographics, occupations, etc.) of the medical service area represented in the CHNA process. Community members that participated in the process, as well as the segment (and sometimes more than one segment) of the community represented, are listed in **Table 1.** For example, a hospital board member may also be a Native Hawaiian. Every effort was made to identify the segments each person represented. The facilitators are presented in **Table 2**.

The Kahuku Medical Center medical service area (MSA) is depicted in **Figure 1**. The MSA includes the five zip codes of 96712, 96717, 96730, 96731, and 96762. The MSA follows zip code boundaries because of data availability.

# Table 1 Kahuku Medical Center Community Health Needs Assessment Advisory Committee Representation

Member	Segment(s) Represented
1.	Medical Director and MD
2.	Businessman (CEO) and Leader, LDS Church
3.	Nurse at Kahuku Medical Center
4.	Kahuku Medical Center Board and Banker
5	Businessman at Resort
6.	Pharmacist at Kahuku Medical Center
7.	Community Health Center
8.	Social Worker at Kahuku Medical Center
9.	Director of Finance at Kahuku Medical Center
10.	Director of Nursing at Kahuku Medical Center
11.	Kahuku Medical Center Board and Businesswoman
12.	Director of Human Resources
13.	Nurse at Kahuku Medical Center
14.	Lab Manager at Kahuku Medical Center
15.	Dentist at Community Health Center
16.	City Council
17.	Vice Principal at High School
18.	CEO of Community Health Center
19.	Administrative Assistant at Kahuku Medical Center
20.	Pediatrician (MD) at Community Health Center
21.	COO of Community Health Center
22.	CEO of Kahuku Medical Center

### Table 2 Kahuku Medical Center Community Health Needs Assessment Facilitators

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and

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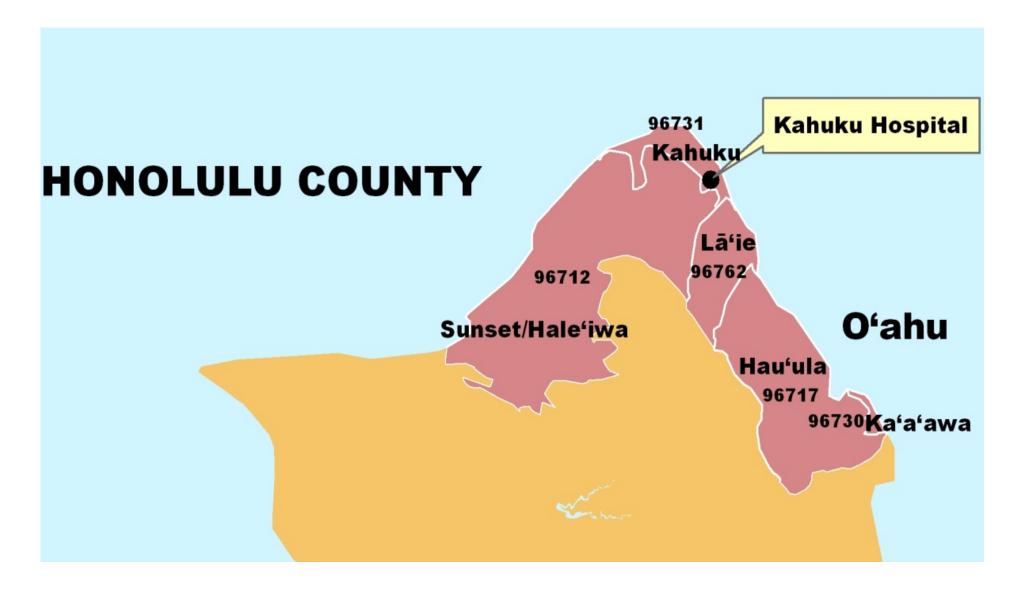
Hawaii State Department of Health State Office of Primary Care & Rural Health

Deborah Birkmire-Peters, Program Director Pacific Basin Telehealth Resource Center John A. Burns School of Medicine University of Hawaii at Manoa

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Phone: 808-692-1090

Figure 1
Kahuku Medical Center Medical Service Area



#### About Kahuku Medical Center

Kahuku Medical Center is the only facility operating within the primary service area offering hospital inpatient, outpatient, and ancillary services. Services provided include 21 beds (all private rooms), 24 hour emergency room, in-house laboratory, in-house radiology, in-house pharmacy, dietary, physical therapy, occupational therapy, respiratory therapy, social services,

and speech therapy. Kahuku Medical Center is licensed for 11 acute/swing beds and 10 skilled/intermediate (SNF/ICF) long term care beds. The hospital campus also houses a primary care physician clinic with family practice, obstetrics/gynecology and pediatric specialties.

Kahuku Medical Center is a designated as a Critical Access Hospital by the State of Hawaii and the Medicare program. The



Medical Center is the emergency safety net for 22,500 residents and approximately one million annual visitors to the North Shore and Koolau Loa areas. The staff of Kahuku Medical Center organization is committed to working together to create a culture that is focused on service, operational excellence, and values our patients, employees, and physicians.

Kahuku Medical Center contracts emergency physicians. These emergency physicians are a diverse group with a wealth of experience, more than 100 years combined in emergency medicine. Having this experience not only makes them better physicians but gives them the breadth of professional and life skills necessary to deal with our diverse patient population. These physicians are committed to bringing the best in emergency care to Kahuku Medical Center and the members of this community. They live here, work here, and are dedicated to serving this area for many years to come. Kahuku Medical Center Emergency Services is open 24 hours a day and provides medical services for patients with illness and injuries, some of which are life threatening requiring immediate medical care.

Kahuku Medical Center contracts for hospitalist care to address the needs of inpatient admissions from the emergency department. With hospitalist care, the inpatient care is turned over to a hospitalist when the patient has no primary care physician (PCP), and the PCP is not available to provide inpatient services.

Kahuku Medical Center is a fully certified CLIA laboratory with state of the art instruments capable of performing various assays in a quick and accurate manner. Kahuku Medical Center has a licensed pharmacy that provides a full range of pharmacy services for hospital patients. The Pharmacy's mission is to help patients and staff make the best use of medications. The Radiology Department has installed a Shimadzu Radiographic X-Ray machine, with a Konica Minolta C.R. System. The respiratory therapist plans, coordinates and delivers respiratory therapy services and programs throughout Kahuku Medical Center for all age groups of patients, including neonates, pediatrics, adolescents, adults and geriatrics.

KMC provides skilled inpatient and outpatient occupational therapy. Physical therapy at Kahuku Medical Center includes treatments for a variety of injuries resulting from motor vehicle accidents, work-related and sports injuries; and diseases involving neurological, orthopedic, and cardiopulmonary impairments. Speech therapy are available for adult acute, skilled nursing, and outpatient care, including clinical services for the remediation of varied cognitive-communicative disorders. A licensed social worker provides a wide range of social services. The mission for social services is to provide the highest quality of life for all patients through the continuum from admission to discharge. Pediatric outpatient services are available and include evaluation and treatment of speech, language, learning, and social communication deficits.

Kahuku Medical Center is a trusted healing resource partner dedicated to assisting in the creation of a thriving healthy community thereby enhancing the quality of life in Ko'olauloa for generation.

#### **Community Input Summary**

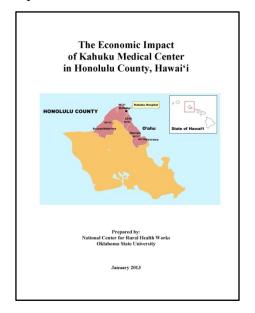
The CHNA advisory committee met four times. At each meeting the committee was given data and discussed the presented data. The reported data and discussion highlights will be presented by meeting.

#### Community Input Meeting #1

The agenda for Meeting #1 is presented in **Table 3**. Since it was the first meeting of the advisory committee, a presentation of the complete CHNA was presented and discussed. The responsibilities of the advisory committee were clearly identified. In addition to this discussion, **Report #1**, the economic impact of Kahuku Medical Center, was presented.

The economic impact of Kahuku Medical Center on the MSA economy is measured by employment, payroll, and construction activities. Kahuku Medical Center provided the direct economic activity data presented in **Table 4**. For 2012, the total full-time, part-time, and contract employment was 143 with wages, salaries, and benefits and contract labor costs of \$5.5 million. Wages, income, when applicable) will be referred to as "income" throughout the rest of the study.

Kahuku Medical Center had construction costs of \$318,000 in 2011 and \$4.1 million in 2013. Based on the 2013 estimated construction activity of \$4.1 million, IMPLAN data were utilized to estimate the construction employment and income. Construction employment was estimated to be 32 construction employees with construction income of \$2.1 million. The average annual salary from construction activities is estimated at \$66,895. These data reflect the direct economic activities of Kahuku Medical Center.



Many rural communities have a large number of elderly, and the ranchers and farmers often retire in the towns. Thus, hospital facilities are an important component of the health sector. In summary, Kahuku Medical Center is vitally important as a community employer and important to the community's economy. The hospital employs a large number of residents. The hospital and the employees in the hospital purchase a large amount of goods and services from businesses in the MSA. These impacts are referred to as secondary impacts or benefits to the economy. Employment and income multipliers for the area have been calculated using the IMPLAN model. The model was developed by the U.S. Forest Service and allows for development of zip code area multipliers. Multipliers generated from the IMPLAN software and data will be utilized to illustrate the secondary impacts.

Kahuku Medical Center creates employment through operations and construction activities. These impacts are shown in **Tables 5** and **6**. The employment multiplier for the hospital operations component is 1.36 (**Table 5**). This indicates that for each job created in that sector, a 0.36 job is created throughout the area due to business (indirect) and household (induced) spending. Applying the employment multiplier to the hospital employment of 143 yields an

## Table 3 Kahuku Medical Center Agenda for Community Meeting #1 Tuesday, January 15, 2013 at 6 pm

- I. Introductions Stephany Nihipali Vaioleti, Administrator, Kahuku Medical Center, and Scott Daniels, Hawaii State Office of Rural Health
- II. Overview of Community Health Needs Assessment Process Deborah Birkmire-Peters
- III. Kahuku Medical Center Services/Community Benefits Stephany Nihipali Vaioleti
- IV. Economic Impact of Kahuku Medical Center Gerald Doeksen
- V. Review Community Health Survey Questionnaire Gregg Kishaba
- VI. Next Steps

Meeting #2, 6 pm, March 5 Meeting #3, 6 pm, April 9 Meeting #4, 6 pm, May 21

## Table 4 Direct Economic Activities of Kahuku Medical Center, Honolulu County, Hawaii

Operations	
2012 Operations Employment	143
2012 Income	\$5,530,000
Construction	
2011	\$318,000
2012	\$0
2013	\$4,085,000
Estimated 2013 Construction Employment Estimate 2013 Construction Income	32 \$2,140,667

SOURCE: Local operations employment and income data and construction data provided by Kahuku Medical Center; Construction employment and income for 2013 estimated from IMPLAN, Minnesota IMPLAN Group, Inc.

Table 5
Employment and Income Impact from Operations of Kahuku Medical Center in Honolulu County, Hawaii

Health Care	Direct		Secondary	Total
Component	Impact	Multiplier	Impact	Impact
Operations Employment	143	1.36	51	194
Operations Income	\$5,530,000	1.19	\$1,050,700	\$6,580,700

SOURCE: Local employment and income data provided by Kahuku Medical Center; multipliers from IMPLAN, Minnesota IMPLAN Group, Inc.

Table 6
Impact from 2013 Construction Activities
of Kahuku Medical Center in Honolulu County, Hawai'i

Health Care	Direct		Secondary	Total
Component	Impact	Impact Multiplier Impact		Impact
Construction Employment	32	1.31	10	42
Construction Income	\$2,140,667	1.15	\$321,100	\$2,461,767

SOURCE: Local construction data for 2013 of \$4,085,000 provided by Kahuku Medical Center; construction employment and income estimated from IMPLAN and construction employment and income multipliers from IMPLAN, Minnesota IMPLAN Group, Inc.

estimate of the hospital's employment impact on the MSA. *Kahuku Medical Center has a total employment impact of 194 employees from operations in 2012*. The secondary impact of Kahuku Medical Center is 51 employees; these are the jobs created in other industry sectors in the economy of the MSA as a result of the spending of Kahuku Medical Center and the spending of the hospital employees.

Data on the income impact from the operations of Kahuku Medical Center are also presented in **Table 5**. Kahuku Medical Center reported income from operations of \$5.5 million in 2012. Using the hospital income multiplier of 1.19, Kahuku Medical Center generated secondary income in other businesses of \$1.1 million. *In 2012, the total income impact of Kahuku Medical Center from operations was \$6.6 million on the economy of the medical service area.* 

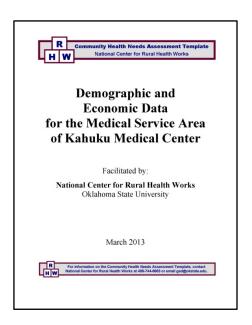
The estimated impact from the 2013 construction activities is illustrated in **Table 6**. The 2013 construction activities resulted in an estimated 32 jobs. These construction jobs worked directly on hospital construction activities. These construction companies and construction workers also have secondary impacts that are measured by multipliers. The construction employment multiplier for the MSA is 1.31. Thus, ten secondary jobs will be created in other businesses due to construction activities of Kahuku Medical Center. *Total employment impact from 2013 hospital construction activities is estimated to be 42 jobs*.

Income generated directly by construction workers engaged in hospital construction activities in 2013 is estimated at \$2.1 million. Applying the construction income multiplier of 1.15, hospital construction activities were estimated to generate \$321,100 in income in other businesses. *In* 2013, Kahuku Medical Center is estimated to have a total income impact from hospital construction activities of \$2.5 million in the medical service area economy.

#### Community Input Meeting #2

The agenda for Meeting #2 is presented in **Table 7**. **Report #2**, the demographic and economic data report, was presented and discussed. The data of most interest was demographics by race and ethnic groups and by age. The past and future trends were discussed.

The complete data and information report consisted of thirteen tables of economic and demographic data. The tables most discussed are presented in this report. Data on **Table 8** reflect population by age for 2000 and 2010 (U.S. Census data). The MSA population increased 10.3%. The number of elderly 65+ grew 26.2%.



### Table 7 Kahuku Medical Center Agenda for Community Meeting #2 Tuesday, March 5, 2013 at 6 pm

- I. Introductions Stephany Nihipali Vaioleti, Administrator, Kahuku Medical Center, and Scott Daniels, Hawaii State Office of Rural Health
- II. Review of Community Meeting #1 Gerald A. Doeksen, National Center for Rural Health
- III. Demographic and Economic Data Study Scott Daniels
- IV. Review Draft #1 of Health Services Directory Deborah Birkmire-Peters, Pacific Basin Telehealth Resource Center, John A. Burns School of Medicine, University of Hawaii
- V. Kahuku Medical Center Community Health Survey Questionnaire Gregg Kishaba, Hawaii State Office of Primary Care and Rural Health
  - a. Community Advisory Committee completes questionnaire and turns in at end of meeting
  - b. Community Advisory Committee takes 5 to 6 surveys for local residents to complete
  - c. Completed survey questionnaires must be returned at Meeting #3 on April 8

#### VII. Next Steps

Meeting #3, 6 pm, April 9 Meeting #4, 6 pm, May 21

Table 8
U.S Census Bureau Population by Zip Code Tabulation Areas by Age Groups and Gender for the Medical Service Area (MSA) of Kahuku Hospital

Zip	Zip Code	ps.		Age G1	coups				Gene	der
Code	Area	0-14	15-19	20-24	25-44	45-64	65+	Totals	Male	Female
<b>2000 Cens</b>	us									
96712 S	unset/Hale'iwa	1,588	572	529	2,470	1,851	689	7,699	4,025	3,674
96717 H	au'ula	1,470	436	346	1,317	1,063	431	5,063	2,471	2,592
96730 K	a'a'awa	337	82	97	464	388	175	1,543	767	776
96731 K	ahuku	658	307	171	673	582	325	2,716	1,400	1,316
96762 L	aie	<u>1,272</u>	<u>556</u>	<u>782</u>	<u>1,311</u>	<u>720</u>	<u>242</u>	<u>4,883</u>	<u>2,324</u>	<u>2,559</u>
2000 Censi	us Totals	<u>5,325</u>	<u>1,953</u>	<u>1,925</u>	<u>6,235</u>	<u>4,604</u>	<u>1,862</u>	<u>21,904</u>	10,987	<u>10,917</u>
2000 % of	Total	<u>24.3%</u>	<u>8.9%</u>	<u>8.8%</u>	<u>28.5%</u>	<u>21.0%</u>	<u>8.5%</u>	<u>100.0%</u>	<u>50.2%</u>	<u>49.8%</u>
<b>2010 Cens</b>	us									
96712 S	unset/Hale'iwa	1,266	377	508	2,314	2,101	786	7,352	3,860	3,492
96717 H	auʻula	1,197	474	431	1,396	1,412	645	5,555	2,749	2,806
96730 K	a'a'awa	316	97	100	418	448	162	1,541	782	759
96731 K	ahuku	805	282	226	800	790	389	3,292	1,667	1,625
96762 L	aie	<u>1,199</u>	<u>911</u>	1,315	<u>1,788</u>	<u>838</u>	<u>368</u>	<u>6,419</u>	<u>2,997</u>	3,422
2010 Censi	us Totals	<u>4,783</u>	<u>2,141</u>	<u>2,580</u>	<u>6,716</u>	<u>5,589</u>	<u>2,350</u>	<u>24,159</u>	12,055	<u>12,104</u>
2010 % of	Total	<u>19.8%</u>	<u>8.9%</u>	<u>10.7%</u>	<u>27.8%</u>	<u>23.1%</u>	<u>9.7%</u>	<u>100.0%</u>	<u>49.9%</u>	<u>50.1%</u>
Percent Cl	hange									
From 2000	to 2010	<u>-10.2%</u>	<u>9.6%</u>	<u>34.0%</u>	<u>7.7%</u>	<u>21.4%</u>	<u>26.2%</u>	<u>10.3%</u>	<u>9.7%</u>	<u>10.9%</u>

SOURCE: 2000 and 2010 census populations by zip code tabulation areas, U. S. Census Bureau (www.census.gov [January 2013]).

Data on **Table 9** reflect population data from ESRI. This table includes population forecasts for 2012 and 2017. Again, the data indicates overall population projections of 3.1% from 2012 to 2017. Over the same period, the elderly 65+ increased 17.6%. This clearly indicates the huge growth in elderly and reflects increased health and medical needs, especially for the elderly.

Data in **Table 10** reflect race and ethnic data from 2000 and 2010 U. S. Census. From 2000 to 2010, the largest change in race was in the black race group with an increase of 51.9%, followed by the "some other race" group with a 27.5% increase and the white race group with a 16.9% increase. The Hispanic origin ethnic group reflected a 18.8% increase from 2000 to 2010.

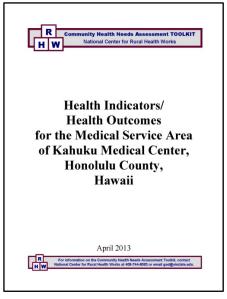
Forecasts of race and ethnic data for 2012 and 2017 are presented in **Table 11.** From 2012 to 2017, ESRI data reflect the largest increase in population in the black race group (90.4%), with the next largest in the American Indian and Alaska Native race group (45.6%), and the third largest in the white race group (10.6%).

#### Community Input Meeting #3

The agenda for Meeting #3 is presented in **Table 12**. The health indicators/health outcomes report, Report #3, was presented and discussed. The complete report contains 38 tables of health indicators/health outcomes data. The tables that received the most attention were Tables 13 and 14. The North Shore/Laie region is basically the Kahuku MSA. The items that received the most attention were tobacco use, obesity, adults not getting a flu shot, and high rates for asthma, chronic obstructive pulmonary disease, angina (coronary heart disease), and arthritis. Tables 15-18 brought additional concerns; i.e., teen birth rate, heart disease death rate, stroke death rate, and motor vehicle collision death rate in Native Hawaiians or other Pacific Islander race group. After a detailed discussion of all health indicators/health outcomes data, the advisory committee members listed their concerns. There are listed in Table 19

#### Community Input Meeting #4

The agenda for meeting #4 is presented in **Table 20**. At the meeting, the health services directory, **Report #4**, was delivered. It contains a list of health providers in the MSA. The purpose of the directory is to provide information on available health and medical services to the residents so they are aware of local providers and can utilize local services.



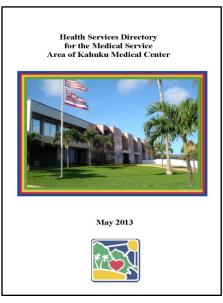


Table 9
ESRI Population by Zip Code Tabulation Areas by Age Groups and Gender for the Medical Service Area (MSA) of Kahuku Hospital

Zip	Zip Code		MINISTER AND THE STATE OF THE S	Age Gr	oups				Gen	der
Code	Area	0-14	15-19	20-24	25-44	45-64	65+	Totals1	Male	Female
2010 ESRI										-93
96712 Suns	set/Hale'iwa	1,276	380	492	2,310	2,136	806	7,400	3,873	3,527
96717 Hau	ʻula	1,158	516	476	1,407	1,410	632	5,599	2,760	2,839
96730 Kaʻa	ı'awa	260	77	83	334	363	138	1,255	635	620
96731 Kah	uku	781	273	224	781	745	371	3,175	1,605	1,570
96762 Laie		<u>1,304</u>	<u>890</u>	1,289	1,858	<u>953</u>	<u>418</u>	<u>6,712</u>	<u>3,160</u>	<u>3,552</u>
2010 ESRI T	otals	<u>4.779</u>	2.136	2.564	<u>6.690</u>	<u>5,607</u>	2,365	<u>24.141</u>	12.033	12,108
2010 % of To	otal	<u>19.8%</u>	<u>8.8%</u>	<u>10.6%</u>	<u>27.7%</u>	<u>23.2%</u>	<u>9.8%</u>	<u>100.0%</u>	<u>49.8%</u>	<u>50.2%</u>
<b>2012 ESRI</b>										
96712 Suns	set/Hale'iwa	1,261	362	502	2,305	2,160	849	7,439	3,904	3,535
96717 Hau	ʻula	1,137	489	479	1,389	1,411	661	5,566	2,747	2,819
96730 Kaʻa	ı'awa	259	74	85	337	368	148	1,271	642	629
96731 Kah	uku	781	262	232	785	757	393	3,210	1,628	1,582
96762 Laie		<u>1,331</u>	<u>883</u>	1,319	<u>1,893</u>	<u>988</u>	<u>456</u>	<u>6,870</u>	<u>3,243</u>	<u>3,627</u>
2012 ESRI T	otals	<u>4,769</u>	2,070	<u>2,617</u>	<u>6,709</u>	<u>5,684</u>	<u>2,507</u>	<u>24,356</u>	<u>12,164</u>	<u>12,192</u>
2012 % of To	otal	<u>19.6%</u>	<u>8.5%</u>	<u>10.7%</u>	<u>27.5%</u>	<u>23.3%</u>	<u>10.3%</u>	<u>100.0%</u>	<u>49.9%</u>	<u>50.1%</u>
<b>2017 ESRI</b>										
	set/Hale'iwa	1,290	352	471	2,351	2,199	990	7,653	4,027	3,626
96717 Hau		1,140	474	447	1,383	1,396	751	5,591	2,762	2,829
96730 Kaʻa		270	73	81	345	378	176	1,323	671	652
96 <b>7</b> 31 Kah		804	257	220	799	770	465	3,315	1,682	1,633
96762 Laie		<u>1,424</u>	<u>900</u>	<u>1,313</u>	<u>1,975</u>	1,039	<u>567</u>	<u>7,218</u>	<u>3,415</u>	<u>3,803</u>
2017 ESRI T	otals	<u>4.928</u>	2,056	2,532	<u>6,853</u>	<u>5,782</u>	<u>2,949</u>	<u>25,100</u>	<u>12,557</u>	<u>12,543</u>
2017 % of To	PA ACRIATEVIA	<u>19.6%</u>	<u>8.2%</u>	<u>10.1%</u>	<u>27.3%</u>	<u>23.0%</u>	<u>11.7%</u>	<u>100.0%</u>	<u>50.0%</u>	<u>50.0%</u>
Percent Ch	0									
From 2010		-0.2%	-3.1%	2.1%	0.3%	1.4%	6.0%	0.9%	1.1%	0.7%
From 2010		3.1%	-3.7%	-1.2%	2.4%	3.1%	24.7%	4.0%	4.4%	3.6%
From 2012	2 to 2017	3.3%	-0.7%	-3.2%	2.1%	1.7%	17.6%	3.1%	3.2%	2.9%

<sup>&</sup>lt;sup>1</sup> The zip code data for 2010 ESRI do not match the 2010 ESRI data in **Table 1** due to rounding. SOURCE: ESRI forecasts for 2012 and 2017 [January 2013].

Table 10
U.S. Census Bureau Population by Zip Code Tabulation Areas by Race and Ethnic Groups for the Medical Service Area (MSA) of Kahuku Hospital

Zip Code Zip C	ode Area	White	Black	American Indian & Alaska Native	Asian	Hawai'ian & Other Pacific Islander	Some Other Race	Two or More Races <sup>1</sup>	Totals	Hispanic Origin <sup>2</sup>
2000 Census		500 - 400 cm (200 - 200 - 200 )	500000000000000000000000000000000000000	The address of the series of the control of the series of	1 100000 10000 10000 10000	alan 1997 ki Andrew Sarawan da Anada alan	10-2004-000-000-00	Sea (Sea Commencement)	Simple Company and Company	
96712 Sunset/H	Iale'iwa	3,399	34	36	1,503	685	74	1,968	7,699	666
96717 Hauʻula		989	35	16	321	1,763	42	1,897	5,063	438
96730 Kaʻa'awa	a	552	6	7	149	338	15	476	1,543	111
96731 Kahuku		576	13	3	717	597	28	782	2,716	207
96762 Laie		<u>1,325</u>	<u>16</u>	7	<u>432</u>	<u>1,854</u>	30	<u>1,219</u>	<u>4,883</u>	<u>164</u>
2000 Census To	tals	<u>6.841</u>	<u>104</u>	<u>69</u>	3.122	<u>5.237</u>	<u>189</u>	<u>6,342</u>	<u>21.904</u>	<u>1.586</u>
2000 % of Total		31.2%	0.5%	<u>0.3%</u>	14.3%	<u>23.9%</u>	<u>0.9%</u>	<u>29.0%</u>	<u>100.0%</u>	<u>7.2%</u>
2010 Census										-
96712 Sunset/H	Iale'iwa	3,813	41	27	1,048	533	135	1,755	7,352	716
96717 Hau'ula		1,236	42	12	365	1,746	33	2,121	5,555	450
96730 Ka'a'awa	a	526	13	4	99	262	12	625	1,541	161
96731 Kahuku		551	14	3	820	951	8	945	3,292	225
96762 Laie		1,872	<u>48</u>	<u>12</u>	<u>853</u>	<u>1,944</u>	<u>53</u>	1,637	6,419	<u>332</u>
2010 Census To	tals	<u>7,998</u>	<u>158</u>	<u>58</u>	3,185	<u>5,436</u>	<u>241</u>	<u>7,083</u>	<u>24,159</u>	<u>1,884</u>
2010 % of Total		<u>33.1%</u>	<u>0.7%</u>	<u>0.2%</u>	<u>13.2%</u>	<u>22.5%</u>	<u>1.0%</u>	<u>29.3%</u>	<u>100.0%</u>	<u>7.8%</u>
Percent Change From 2000 to 20		<u>16.9%</u>	<u>51.9%</u>	<u>-15.9%</u>	<u>2.0%</u>	<u>3.8%</u>	<u>27.5%</u>	<u>11.7%</u>	10.3%	<u>18.8%</u>

SOURCE: 2000 and 2010 census populations by zip code tabulation areas, U. S. Census Bureau (www.census.gov [January 2013]).

<sup>&</sup>lt;sup>1</sup> Two or more races indicates a person is included in more than one race group; it was introduced as a new category in the 2000 Census.

<sup>&</sup>lt;sup>2</sup> Hispanic population is not a race but rather a description of ethnic origin; Hispanics are included in the five race groups.

Table 11
ESRI Population by Zip Code Tabulation Areas by Race and Ethnic Groups for the Medical Service Area (MSA) of Kahuku Hospital

Zip Zip Code		692754	American Indian		Native Hawai'ian &	Some Other	Two or		Hispanic
Code Area	White	Black	& Alaska Native	Asian	Other Pacific Islander	Race	More Races	Totals1	Origin
2010 ESRI									
96712 Sunset/Hale'iwa	3,745	40	26	1,184	542	132	1,727	7,396	700
96717 Hau'ula	1,320	43	13	417	1,641	35	2,129	5,598	452
96730 Ka'a'awa	416	11	3	87	236	10	491	1,254	127
96731 Kahuku	487	12	4	802	937	8	927	3,177	215
96762 Laie	1,929	<u>51</u>	<u>11</u>	<u>823</u>	<u>2,087</u>	<u>53</u>	<u>1,758</u>	6,712	<u>367</u>
2010 ESRI Totals	<u>7,897</u>	<u>157</u>	<u>57</u>	<u>3,313</u>	<u>5,443</u>	<u>238</u>	<u>7.032</u>	<u>24,137</u>	<u>1,861</u>
2010 % of Total	<u>32.4%</u>	<u>0.6%</u>	<u>0.2%</u>	<u>13.6%</u>	<u>22.3%</u>	<u>1.0%</u>	<u>28.9%</u>	<u>100.0%</u>	<u>7.6%</u>
2012 ESRI									
96712 Sunset/Hale'iwa	3,953	63	35	1,096	512	135	1,645	7,439	20 10404040
96717 Hauʻula	1,431	69	17	392	1,562	36	2,059	5,566	
96730 Ka'a'awa	455	18	4	83	225	10	476	1,271	138
96731 Kahuku	548	20	6	782	920	8	926	3,210	
96762 Laie	2,125	<u>81</u>	<u>17</u>	<u>783</u>	<u>2,056</u>	<u>56</u>	<u>1,752</u>	<u>6,870</u>	<u>407</u>
2012 ESRI Totals	<u>8,512</u>	<u>251</u>	<u>79</u>	<u>3,136</u>	<u>5,275</u>	<u>245</u>	<u>6,858</u>	<u>24,356</u>	<u>2,016</u>
2012 % of Total	<u>34.9%</u>	<u>1.0%</u>	<u>0.3%</u>	<u>12.9%</u>	<u>21.7%</u>	<u>1.0%</u>	<u>28.2%</u>	<u>100.0%</u>	<u>8.3%</u>
2017 ESRI									
96712 Sunset/Hale'iwa	4,269	118	49	993	485	142	1,597	7,653	1200-000
96717 Hauʻula	1,581	130	25	356	1,470	39	1,990	5,591	574
96730 Ka'a'awa	510	35	5	77	214	11	471	1,323	168
96731 Kahuku	647	40	9	753	910	9	947	3,315	279
96762 Laie	<u>2,405</u>	<u>155</u>	<u>27</u>	<u>725</u>	<u>2,053</u>	<u>63</u>	1,790	7,218	<u>508</u>
2017 ESRI Totals	<u>9,412</u>	<u>478</u>	<u>115</u>	<u>2,904</u>	<u>5,132</u>	<u>264</u>	<u>6.795</u>	<u>25,100</u>	<u>2,446</u>
2017 % of Total	<u>37.5%</u>	<u>1.9%</u>	<u>0.5%</u>	<u>11.6%</u>	<u>20.4%</u>	<u>1.1%</u>	<u>27.1%</u>	100.0%	<u>9.7%</u>
<b>Percent Change</b>									
From 2010 to 2012	7.8%	59.9%	38.6%	-5.3%	-3.1%	2.9%	-2.5%	0.9%	THE TRANSPORT OF THE PARTY OF T
From 2010 to 2017	19.2%	204.5%	101.8%	-12.3%	-5.7%	10.9%	-3.4%	4.0%	
From 2012 to 2017	10.6%	90.4%	45.6%	-7.4%	-2.7%	7.8%	-0.9%	3.1%	21.3%

 $<sup>^1</sup>$  The zip code data for 2010 ESRI do not match the 2010 ESRI data in **Table 1** due to rounding. SOURCE: ESRI forecasts for 2012 and 2017 [January 2013].

### Table 12 Kahuku Medical Center Agenda for Community Meeting #3 Tuesday, April 9, 2013 at 6 pm

- I. Introductions Stephany Nihipali Vaioletti, Administrator, Kahuku Medical Center, and Scott Daniels, Hawaii State Office of Primary Care and Rural Health
  - **II.** Review of Community Meetings #1 and #2 Gerald A. Doeksen, National Center for Rural Health Works
  - III. Collect Completed Community Health Survey Questionnaires Deborah Birkmire-Peters
  - **IV.** Review Draft #2 of Health Services Directory Deborah Birkmire-Peters
  - V. Health Indicators/Health Outcomes Data Scott Daniels
  - VI. Discussion of Health Indicators/Health Outcomes Data Scott Daniels
- VII. Next Steps

Meeting #4, 6 pm, May 21

Table 13
Selected Health Behavioral Risk Factors
for the North Short/Laie Community, Honolulu County, and State of Hawaii, 2011

Physical health not good - Adults with at least one physically unhealthy day in the past 30 days  Average number of physically unhealthy days in the past 30 days  Mental health not good - Adults with at least one mentally unhealthy day in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  34.0%  32.5%  32.6%  Average number of mentally unhealthy days in the past 30 days  Adults without any kind of health care coverage  Adults in the past 12 months unable to see a doctor because of the cost  Adults that report seldom or never using a seatbelt  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of binge drinking (more than 2 drinks per day for men, 1 per day for women)  About at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Adults that report smoking >100 cigarettes in their lifetime  Adults that report smoking >100 cigarettes in their lifetime  Adults who are aware of the Hawaii Tobacco Quitline  Adults who are aware of the Hawaii Tobacco Quitline  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  16.5%  12.3%  13.0%	·	North/	Honolulu	State of
Poor or fair health - Adults reporting fair or poor health         13.9%         14.6%         15.0%           Physical health not good - Adults with at least one physically unhealthy days in the past 30 days         29.0%         35.4%         35.7%           Average number of physically unhealthy days in the past 30 days         2.7         2.9         3.0           Mental health not good - Adults with at least one mentally unhealthy days in the past 30 days         32.0%         32.5%         32.6%           Average number of mentally unhealthy days in the past 30 days         2.3         2.7         2.8           Health Care Access         2         3.2         2.8           Adults without any kind of health care coverage         10.8%         8.7%         9.6%           Adults in the past 12 months unable to see a doctor because of the cost         6.0%         8.0%         9.5%           Seatbelt Use         5.4%         1.8%         1.8%         1.8%           Physical Activity         Adults that report seldom or never using a seatbelt         5.4%         1.8%         1.8%           Alults that did not participate in any physical activities/exercise in the past month, other than regular job         18.5%         21.1%         20.6%           Alults that fisk of binage drinking (5+ drinks for men, 4+ drinks for women on an occasion)         20.7%         20.3%		Shore/Laie <sup>1</sup>	County	Hawaii
Physical health not good - Adults with at least one physically unhealthy day in the past 30 days  Average number of physically unhealthy days in the past 30 days  Mental health not good - Adults with at least one mentally unhealthy day in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  34.0%  32.5%  32.6%  Average number of mentally unhealthy days in the past 30 days  Adults without any kind of health care coverage  Adults in the past 12 months unable to see a doctor because of the cost  Adults that report seldom or never using a seatbelt  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of binge drinking (more than 2 drinks per day for men, 1 per day for women)  About at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Adults that report smoking >100 cigarettes in their lifetime  Adults that report smoking >100 cigarettes in their lifetime  Adults who are aware of the Hawaii Tobacco Quitline  Adults who are aware of the Hawaii Tobacco Quitline  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  16.5%  12.3%  13.0%	Health Status			
Average number of physically unhealthy days in the past 30 days  Mental health not good - Adults with at least one mentally unhealthy day in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Beather Access  Adults without any kind of health care coverage  Adults in the past 12 months unable to see a doctor because of the cost  Seathelt Use  Adults that report seldom or never using a seathelt  Physical Activity  Adults that did not participate in any physical activities/exercise in the past month, other than regular job  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of binge drinking (more than 2 drinks per day for men, 1 per day for women)  Tobacco Use  Adults that report smoking >100 cigarettes in their lifetime  Adults that report smoking >100 cigarettes in their lifetime  Adults who are aware of the Hawaii Tobacco Quitline  Body Weight  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  16.5% 12.3% 13.0%	Poor or fair health - Adults reporting fair or poor health	13.9%	14.6%	15.0%
Mental health not good - Adults with at least one mentally unhealthy day in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Average number of mentally unhealthy days in the past 30 days  Adults without any kind of health care coverage  Adults without any kind of health care coverage  Adults in the past 12 months unable to see a doctor because of the cost  Seatbett Use  Adults that report seldom or never using a seatbelt  Physical Activity  Adults that did not participate in any physical activities/exercise in the past month, other than regular job  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Tobacco Use  Adults that report smoking >100 cigarettes in their lifetime  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  Body Weight  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  13.40  34.09  34.09  34.09  34.09  34.09  34.09  34.09  34.09  34.09  34.09  34.09  35.79  36.09	Physical health not good - Adults with at least one physically unhealthy day in the past 30 days	29.0%	35.4%	35.7%
Average number of mentally unhealthy days in the past 30 days 2.3 2.7 2.8  **Health Care Access**  Adults without any kind of health care coverage Adults in the past 12 months unable to see a doctor because of the cost 6.0% 8.0% 9.5%  **Seathett Use**  Adults that report seldom or never using a seatbelt 7.4% 1.8% 1.8% Physical Activity Adults that did not participate in any physical activities/exercise in the past month, other than regular job 18.5% 21.1% 20.6%  **Alcohol Consumption**  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion) 20.7% 20.3% 20.4% Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women) 8.5% 6.1% 7.0%  **Tobacco Use**  Adults that report smoking >100 cigarettes in their lifetime 48.4% 41.8% 42.7% Adults char report smoking 100 cigarettes in their lifetime 48.4% 41.8% 54.7% Adults who are aware of the Hawaii Tobacco Quitline 50.0%  **Body Weight**  Adults that are overweight or obese (Body Mass Index $\geq$ 25) 59.4% 54.2% 54.0%  **Fruits and Vegetables**  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day 50.00	Average number of physically unhealthy days in the past 30 days	2.7	2.9	3.0
Health Care AccessAdults without any kind of health care coverage10.8%8.7%9.6%Adults in the past 12 months unable to see a doctor because of the cost6.0%8.0%9.5%Seatbelt Use3.4%1.8%1.8%Adults that report seldom or never using a seatbelt5.4%1.8%1.8%Physical Activity4.0%1.8.%21.1%20.6%Adults that did not participate in any physical activities/exercise in the past month, other than regular job18.5%21.1%20.6%Alcohol Consumption20.7%20.3%20.4%Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)20.7%20.3%20.4%Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)8.5%6.1%7.0%Tobacco UseAdults that report smoking >100 cigarettes in their lifetime48.4%41.8%42.7%Adults that report smoking >100 cigarettes in their lifetime48.4%41.8%42.7%Adults who are aware of the Hawaii Tobacco Quitline75.5%79.8%78.0%Body Weight59.4%54.2%54.0%Fruits and VegetablesAdults that eat fruits or drink 100% pure fruit juice 3 times or more per day16.5%12.3%13.0%	Mental health not good - Adults with at least one mentally unhealthy day in the past 30 days	34.0%	32.5%	32.6%
Adults without any kind of health care coverage Adults in the past 12 months unable to see a doctor because of the cost  Seatbelt Use  Adults that report seldom or never using a seatbelt  Physical Activity  Adults that did not participate in any physical activities/exercise in the past month, other than regular job  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Adults that report smoking >100 cigarettes in their lifetime  Adults that report smoking >100 cigarettes in their lifetime  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  Body Weight  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  10.8% 8.7% 18.0% 19.5% 12.3% 13.0%	Average number of mentally unhealthy days in the past 30 days	2.3	2.7	2.8
Adults in the past 12 months unable to see a doctor because of the cost $Seatbelt\ Use$ Adults that report seldom or never using a seatbelt $S.4\%$	Health Care Access			
Seatbelt Use  Adults that report seldom or never using a seatbelt  Adults that report seldom or never using a seatbelt  Physical Activity  Adults that did not participate in any physical activities/exercise in the past month, other than regular job  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Adults that report smoking >100 cigarettes in their lifetime  Adults currently smoking  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  Body Weight  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  18.5%  18.5%  18.5%  21.1%  20.6%  20.4%  20.4%  20.3%  20.4%  6.1%  7.0%	Adults without any kind of health care coverage	10.8%	8.7%	9.6%
Adults that report seldom or never using a seatbelt $5.4\%$ $1.8\%$ $1.8\%$ Physical Activity Adults that did not participate in any physical activities/exercise in the past month, other than regular job $18.5\%$ $21.1\%$ $20.6\%$ Alcohol Consumption Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion) $20.7\%$ $20.3\%$ $20.4\%$ Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women) $8.5\%$ $6.1\%$ $7.0\%$ Tobacco Use Adults that report smoking >100 cigarettes in their lifetime $48.4\%$ $41.8\%$ $42.7\%$ Adults currently smoking $40.0\%$ Adults who are aware of the Hawaii Tobacco Quitline $40.0\%$ Adults that are overweight or obese (Body Mass Index $\ge 25$ ) $40.0\%$ Tobacco Use Adults that are overweight or obese (Body Mass Index $\ge 25$ ) $40.0\%$ Tobacco Use Adults that are fruits or drink 100% pure fruit juice 3 times or more per day $40.0\%$	Adults in the past 12 months unable to see a doctor because of the cost	6.0%	8.0%	9.5%
Physical Activity Adults that did not participate in any physical activities/exercise in the past month, other than regular job  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Tobacco Use  Adults that report smoking >100 cigarettes in their lifetime  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  Body Weight  Adults that are overweight or obese (Body Mass Index ≥ 25)  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  18.5%  21.1%  20.6%  20.6%  20.4%  20.3%  20.4%  6.1%  7.0%  7.0%  7.0%  6.1%  7.0%  7.0%  6.1%  7.0%  7.0%  6.1%  6.1%  7.0%  6.1%  7.0%  6.1%  7.0%  6.1%  6.	Seatbelt Use			
Adults that did not participate in any physical activities/exercise in the past month, other than regular job  Alcohol Consumption  Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  Tobacco Use  Adults that report smoking >100 cigarettes in their lifetime  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  Adults who are aware of the Hawaii Tobacco Quitline  Adults that are overweight or obese (Body Mass Index $\geq 25$ )  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  18.5%  21.1%  20.6%  20.6%  20.3%  20.4%  6.1%  7.0%  7.0%  7.0%  48.4%  41.8%  42.7%  78.0%  78.0%  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  16.5%  12.3%  13.0%	Adults that report seldom or never using a seatbelt	5.4%	1.8%	1.8%
Alcohol Consumption20.7%20.3%20.4%Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)20.7%20.3%20.4%Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)8.5%6.1%7.0%Tobacco Use7.0%48.4%41.8%42.7%Adults that report smoking >100 cigarettes in their lifetime48.4%41.8%42.7%Adults currently smoking19.1%16.6%16.8%Adults who are aware of the Hawaii Tobacco Quitline75.5%79.8%78.0%Body Weight75.5%79.8%54.2%54.0%Adults that are overweight or obese (Body Mass Index ≥ 25)59.4%54.2%54.0%Fruits and Vegetables54.2%54.0%16.5%12.3%13.0%	Physical Activity			
Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)  Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  **Tobacco Use**  Adults that report smoking >100 cigarettes in their lifetime  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  **Adults who are aware of the Hawaii Tobacco Quitline  **Adults that are overweight or obese (Body Mass Index $\geq 25$ )  **Fruits and Vegetables**  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Defaults on an occasion of the volument of the second of the sec	Adults that did not participate in any physical activities/exercise in the past month, other than regular job	18.5%	21.1%	20.6%
Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)  **Tobacco Use**  Adults that report smoking >100 cigarettes in their lifetime*  Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  **Adults who are aware of the Hawaii Tobacco Quitline  **Body Weight**  Adults that are overweight or obese (Body Mass Index $\geq 25$ )  **Fruits and Vegetables**  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Body Weight**  **Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Adults day for women)  **8.5%*  48.4%*  41.8%*  42.7%*  48.4%*  41.8%*  42.7%*  75.5%* 79.8%* 78.0%*  **Fruits and Vegetables*  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Body Weight**  **Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Body Weight**  **Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Body Weight**  **Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  **Body Weight**  **Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day	Alcohol Consumption			
Tobacco UseAdults that report smoking >100 cigarettes in their lifetime $48.4\%$ $41.8\%$ $42.7\%$ Adults currently smoking $19.1\%$ $16.6\%$ $16.8\%$ Adults who are aware of the Hawaii Tobacco Quitline $75.5\%$ $79.8\%$ $78.0\%$ Body Weight $80\%$	Adults at risk of binge drinking (5+ drinks for men, 4+ drinks for women on an occasion)	20.7%	20.3%	20.4%
Adults that report smoking >100 cigarettes in their lifetime 48.4% 41.8% 42.7% Adults currently smoking 19.1% 16.6% 16.8% Adults who are aware of the Hawaii Tobacco Quitline 75.5% 79.8% 78.0% 80dy Weight Adults that are overweight or obese (Body Mass Index $\geq$ 25) 59.4% 54.2% 54.0% Fruits and Vegetables Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day 16.5% 12.3% 13.0%	Adults at risk of heavy drinking (more than 2 drinks per day for men, 1 per day for women)	8.5%	6.1%	7.0%
Adults currently smoking  Adults who are aware of the Hawaii Tobacco Quitline  Body Weight  Adults that are overweight or obese (Body Mass Index $\geq 25$ )  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  19.1%  16.6%  75.5%  79.8%  78.0%  54.0%  Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  16.5%  12.3%  13.0%	Tobacco Use			
Adults who are aware of the Hawaii Tobacco Quitline 75.5% 79.8% 78.0% Body Weight  Adults that are overweight or obese (Body Mass Index $\geq$ 25) 59.4% 54.2% 54.0% Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day 16.5% 12.3% 13.0%	Adults that report smoking >100 cigarettes in their lifetime	48.4%	41.8%	42.7%
Body WeightAdults that are overweight or obese (Body Mass Index $\geq 25$ )59.4%54.2%54.0%Fruits and VegetablesAdults that eat fruits or drink 100% pure fruit juice 3 times or more per day16.5%12.3%13.0%	Adults currently smoking	19.1%	16.6%	16.8%
Adults that are overweight or obese (Body Mass Index $\geq$ 25) 59.4% 54.2% 54.0% Fruits and Vegetables  Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day 16.5% 12.3% 13.0%	Adults who are aware of the Hawaii Tobacco Quitline	75.5%	79.8%	78.0%
Fruits and Vegetables Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day  16.5% 12.3% 13.0%	Body Weight			
Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day 16.5% 12.3% 13.0%	Adults that are overweight or obese (Body Mass Index $\geq 25$ )	59.4%	54.2%	54.0%
	Fruits and Vegetables			
Adults that eat vegetables 3 times or more per day 27.3% 18.4% 19.3%	Adults that eat fruits or drink 100% pure fruit juice 3 times or more per day	16.5%	12.3%	13.0%
	Adults that eat vegetables 3 times or more per day	27.3%	18.4%	19.3%

SOURCE: Hawaii State Department of Health, Behavioral Risk Factor Surveillance System (www.health.hawaii.gov[March 2013]).

<sup>&</sup>lt;sup>1</sup>The medical service area for Kahuku Medical Center most closely matches the Hawaii State Department of Health's geographic area definition of the North Shore/Laie community, which is comprised of the zip codes 96791, 96712, 96731, 96762, 96717, and 96730.

Table 14
Selected Health Behavioral Risk Factors
for the North Short/Laie Community, Honolulu County, and State of Hawaii, 2011

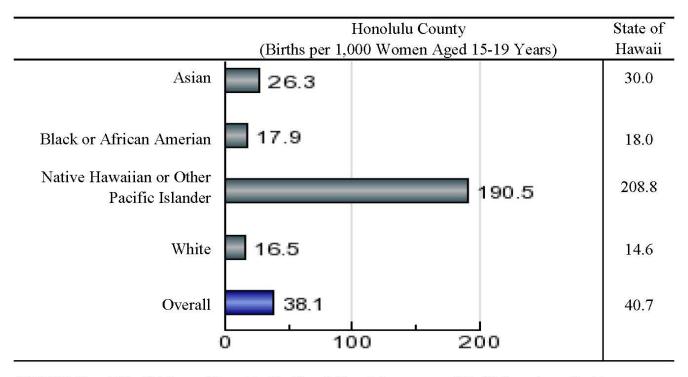
	North/	Honolulu	State of
	Shore/Laie <sup>1</sup>	County	Hawaii
Immunization: Flu and Pneumonia			
Adults that reported not receiving a flu shot or vaccine in the past 12 months	59.6%	51.7%	54.5%
Adults aged 65 years and older that reported not having had a pneumonia shot	14.5%	27.5%	29.2%
Medical Conditions (percent of adults diagnosed by a healthcare professional)			
Asthma	26.7%	16.3%	16.2%
Chronic Obstructive Pulmonary Disease	8.4%	4.3%	4.4%
Kidney Disease	4.1%	3.3%	3.3%
Diabetes	5.5%	8.7%	8.4%
Pre-diabetes or borderline diabetes	3.4%	10.8%	10.6%
Myocardial infarction (heart attack)	1.3%	3.3%	3.2%
Angina (coronary heart disease)	4.4%	3.0%	3.0%
Stroke	1.1%	2.7%	2.5%
High blood pressure	26.4%	29.4%	28.7%
High cholesterol	19.9%	29.0%	27.8%
Disability (limited in any way because of health problems)	11.7%	17.5%	18.1%
Arthritis	20.5%	17.5%	18.2%
Medical Testing			
HIV (percent of adults tested, not counting blood donation tests)	29.5%	27.4%	28.8%

SOURCE: Hawaii State Department of Health, Behavioral Risk Factor Surveillance System (www.health.hawaii.gov[March 2013]).

<sup>&</sup>lt;sup>1</sup>The medical service area for Kahuku Medical Center most closely matches the Hawaii State Department of Health's geographic area definition of the North Shore/Laie community, which is comprised of the zip codes 96791, 96712, 96731, 96762, 96717, and 96730.

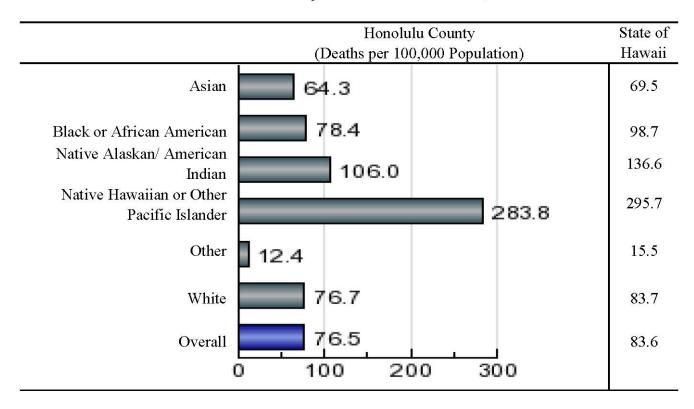
Table 15

Teen Birth Rate by Race/Ethnicity
for Honolulu County and the State of Hawaii, 2010



22

Table 16
Heart Disease Death Rate by Race/Ethnicity
for Honolulu County and the State of Hawaii, 2010



23

Table 17
Stroke Death Rate by Race/Ethnicity
for Honolulu County and the State of Hawaii, 2010

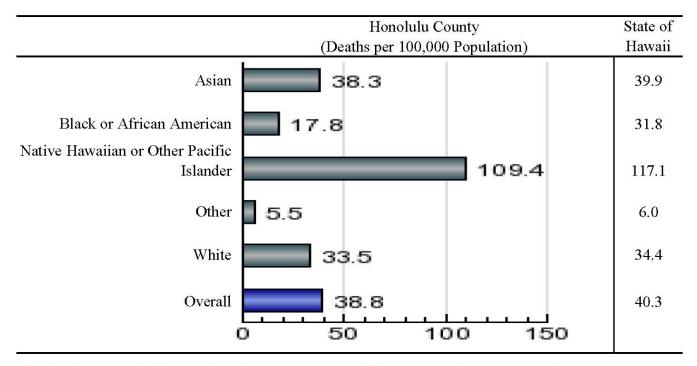
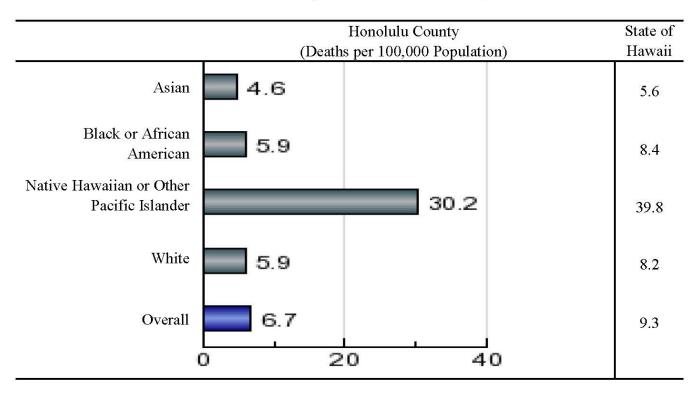


Table 18

Motor Vehicle Collision Death Rate by Race/Ethnicity
for Honolulu County and the State of Hawaii, 2010



25

#### Table 19

#### Kahuku Medical Center Community Health Needs Assessment -Health Issues Discussed on April 9, 2013 (Meeting #3)

#### I Outreach to Native Hawaiians

#### Problem:

- Native Hawaiians Health System has not been visible in area due to funding cuts.
- Need educational programs.
- Diet often centered around starch (cultural and cost).
- Family important and cultural events encouraged.
- Starchy food and big portions.
- Culture has been that big baby was healthy baby.
- Teen pregnancy rate was alarming.

#### Solutions suggested:

- Encourage healthier diets.
- Encourage gardening as strategy for fruits and vegetables.
- Partner with other native health groups to reach all generations, including teens.

#### **II** Outreach to Community

#### Problem:

- Residents not completely aware of public health statistics.
- Cancer, diabetes, obesity concern among adults and kids.

#### Solution:

- Education and outreach need to be multi-generational.
- Need to promote "Personal Responsibility" which means prevention and lead by example.
- Partner with health plans.

#### III. Foster or create "community gardens" in area

#### Problem:

• Kahuku had a large Kellogg grant and there was no sustainability.

#### **Solution:**

- Garden will increase fruits and vegetables intake.
- Could teach importance of diet and portion control.

#### Table 20 Kahuku Medical Center Agenda for Community Meeting #4 Tuesday, May 21, 2013 at 6 pm

- I. Introductions Stephany Nihipali Vaioletti, Administrator, Kahuku Medical Center, and Scott Daniels, Hawaii State Office of Primary Care and Rural Health
  - II. Review of Community Meetings #1, #2, and #3 Gerald A. Doeksen
  - III. Hand out Final Health Services Directory Gerald Doeksen
  - **IV.** Present Health Survey Results Scott Daniels
  - V. Develop Community Action Plan Scott Daniels
    - a. List community health issues
    - b. Prioritize community health issues
    - c. Discuss possible resolution for health issues
    - d. Summarize community recommendations
    - e. Hospital Administrator Response Stephany Nihipali Vaioleti

#### VI. Next Steps

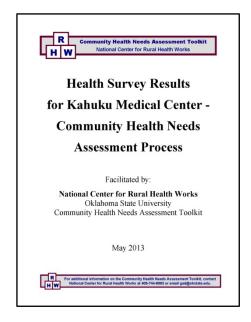
Community Health Needs Assessment Summary Report will be available (website)

Hospital Board Action Plan will be prepared, distributed, and made available to the public (website)

The main portion of the meeting was used to present results of the community health needs survey, **Report #5**. Each advisory committee member took surveys to the segments of the MSA population represented. In addition, the survey was made available on the internet via "Survey Monkey." A total of 210 completed surveys were returned. This survey asked the age of the respondent. Results of the age analysis indicated that the survey was representative of the MSA population.

Twenty questions were asked in the survey. **Questions 17** and **18** lead to the most discussions at the meeting. **Question 17** is presented in **Table 21**.

In **Table 21**, the concerns that received the most responses were hospital services (29.7%), lack of doctors/primary care (8.0%), specific disease issues (7.6%), and specialty



care (7.2%). In **Table 22**, the need for specialty care was the top response with 46.9% of the total responses listed as services the respondents would like to see offered at Kahuku Medical Center.

The advisory committee discussed all survey responses and listed in **Table 23** the items that they considered as the most pressing issues and concerns.

Table 21 What concerns you most about health care in our community?

what concerns you most about nearth care in our	Subtot		To	otals
Response Category	No.	%	No.	%
Nothing	12	4.6%	12	4.6%
Specialty Care			19	7.2%
Lack of specialists/limited specialty care	17	6.5%		
Labor & delivery	2	0.8%		
Education			11	4.2%
Lack of preventive education/Holistic approach/fitness education	6	2.3%		
Lack of health education	5	1.9%		
Physicians		TENNEN N. S.	21	8.0%
Not enough doctors/ Lack of quality doctors	9	3.4%	H=300	
Doctors not taking new patients/availability of appointments	3	1.1%		
Long waiting time	3	1.1%		
Consistent physician care and place	1	0.4%		
Doctors getting older	1	0.4%		
Medical care attention & knowledge	1	0.4%		
Need more frequent check-ups	1	0.4%		
Need weekend clinic hours	1	0.4%		
Quality time with physician/too busy	1	0.4%		
Hospital		V. 1.7 V.	78	29.7%
Not enough services/Availability of services	15	5.7%	, 0	
Insurance acceptance/lack of funds/inability to pay/increasing costs/billing	10	2.770		
issues/inability to obtain health care due to lack of insurance, funds, etc./accepting	11	4.2%		
Ambulance and emergency care for heart/stroke/serious accidents/in general	7	2.7%		
Hospital facilities/equipment/sanitation	7	2.7%		
Keeping the hospital open	7	2.7%		
Quality of care	7	2.7%		
Educating general public on hospital services	5	1.9%		
Accessibility to facility/distance to facility	4	1.5%		
Limited hospital resources/perception of limited resources	4	1.5%		
Other (one answer responses)	11	4.2%		
Community Services			16	6.1%
Mental health/Substance abuse/Alcohol Abuse	9	3.4%		
Home supervision support/Free home supervision support	3	1.1%		
Elderly services	2	0.8%		
Services for low income	1	0.4%		
Transportation for medical care	1	0.4%		
Specific Health Conditions			20	7.6%
Diabetes	6	2.3%		
Obesity	5	1.9%		
Other (one answer responses)	9	3.4%		
Don't know	4	1.5%	4	1.5%
No Response	82	31.2%	82	31.2%
Total	263	100.0%	263	100.0%

Some respondents answered more than once.

Table 22 What services would you like to see offered at Kahuku Medical Center?

Response Category	vices would you like to see offered at Kanuku	No.	%	No.	%
None		No.	2.1%	No. 5	2.1%
Specialty Care			2.170	113	46.9%
Diagnostic Services: CT Scan, MRI, PET scans, mammogram		19	7.9%	113	10.570
OB/GYN/Labor & Delivery/Women's health		18	7.5%		
More specialty care/Specialty clinics		13	5.4%		
Dialysis		12	5.0%		
Cardiology/Cardiac care/Cardiopulmonary		9	3.7%		
Mental health/Behavioral health/Drug & alcohol		4	1.7%		
Nephrologist/Kidney center		4	1.7%		
Massage		3	1.2%		
Dental		3	1.2%		
Minor surgerySame day surgery/Surgery		3	1.2%		
Assistance with elderly care/Home care/Follow-up services		3	1.2%		
Other (two answer	(Alternative medicine/Accupuncture, healing touch,		1.2,0		
3%	Naturopathy; Home health services; Orthopedics;				
responses)	Nutrition/Healthy diets)	8	3.3%		
Other (one answer	(Rheumatology, Chiropractor, Pharmacy, Osteopathy,				
responses)	Respiratory, Gastrology, Cataract Surgery, Podiatry,				
responses	Eye care, Dermatology, Cancer services, Kidney				
	center, Aquatic therapy, Hearing services [i.e. sign	1.4	5.8%		
Community Somioos	language])	14	3.8%	15	6.2%
Community Services  Community fitness contan/Holistic Vision/Weight loss		10	4.1%	13	0.2%
Community fitness center/Holistic Vision/Weight loss Adult Day Services/Affordable		10 3	1.2%		
M.D.		3	1.270		
Other	(Support services without travel; community workshops)	2	0.8%		
Hospital	workshops)		0.070	28	11.6%
Emergency care		6	2.5%	(A-1046)	47247 (A) 51
Community outreach services		4	1.7%		
Better quality of care		3	1.2%		
Full service hospital		3	1.2%		
More services		2	0.8%		
Other	(Better physical therapy facility; Blood pressure &		2323272		
	cholesterol testing; Community-based hospital;				
	Everything; Insurance assistance; LTC services				
	[hospital should provide]; More awareness/Community				
	involvement, Partnerships with HMO's for more				
	services; Suicide assistance; Teen pregnancy	10	4.107		
Education	prevention)	10	4.1%	0	2.20/
Prevention Education Programs		6	2.50/	8	3.3%
16		6	2.5%		
Other	(Early childhood lessons; Training for self care)	2	0.8%	, i	1.70/
Physicians	(241 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 2 - 11 - 1 -			4	1.7%
Other	(24-hour physician clinic; Flu shots; Reasonable cost	4	1.7%		
Don't know/No Resp	primary care physician; Regular check-ups) (Don't know [11]; No Response [57])	68	28.2%	68	28.2%
Total	(Dollt Kilow [11], 140 Kespolise [37])	241	100.0%	241	100.0%
Some respondents answered	1	241	100.070	241	100.070

Some respondents answered more than once.

## Table 23 Kahuku Medical Center Community Health Needs Assessment – Community Health Issues Identified by Advisory Committee at Meeting #4

- I. Recruitment and retention of primary care providers.
  - Attract nurse practitioner and physician assistants to help fill primary care needs.
  - Need case manager to follow-up with patients to reduce re-admissions.
- II. Investigate possibility of attracting specialists (one day a week or some regular scheduled).
  - Look into telehealth for some specialists.
  - Look into providing space for specialists (renovate rooms, if necessary).
- III. Marketing the services of Kahuku Medical Center.
  - Better collaboration with clinics.
  - Work with BYU to offer services.
  - Investigate all ways to inform community; i.e., newsletter, speakers at community meetings, website, reach out to Native Hawaiians, church groups, etc.
- IV. Committee would like to meet again in one year to follow-up on priorities.

#### **Community Health Need Recommendations and Implementation Strategies**

Due to limited resources, the Kahuku Medical Center and Kahuku community cannot address all issues identified in **Table 19** from Meeting #3 and **Table 23** from Meeting #4. The community advisory committee members were asked to identify and list their top priorities and discuss implementation strategies. The priorities identified and possible implementation strategies are:

#### Community outreach programs

- Hospital will reach out to Native Hawaiians.
  - ➤ Inform them of services at Kahuku Medical Center.
  - ➤ Hold educational programs to address poor health indicator data; i.e., stroke, heart disease, etc.
- Hospital will reach out to all groups with website, newsletters, schools, and presentations.
  - Will offer to speak at civic group meetings, churches, senior citizens, etc.
  - Will conduct health fairs and be present at community events.

#### Investigate telehealth programs

- Hospital will work with Dr. Deborah Birkmire-Peters, Pacific Basin Telehealth Resource Center, John A. Burns School of Medicine, University of Hawaii, to investigate telehealth options that will be most feasible to the community.
- Hospital will investigate using telehealth tools to reduce and prevent re-admissions.

#### Develop program for provider recruitment and retention.

- Current providers, community leaders, and Kahuku Medical Center need to collaborate on this issue.
- Having sufficient number of providers assists clinics and hospital.
- Hospital will investigate feasibility of having specialists in the community (i.e., Cardiologist one day per week) and providing space for the visiting specialists.